

Series on general management functions and activities, and their relevance to the management of projects¹

Article 2 of 7

Management Planning Function and Activities

By Alan Stretton

BACKGROUND TO THIS SERIES

General management provides the foundation for building project management skills and is often essential for the project manager. On any given project, skill in any number of general management areas may be required. General management literature documents these skills, and their application is fundamentally the same on a project. (PMI 2004:15)

This lead quotation, which will head all the articles in this series, reflects the widely acknowledged importance of general management skills in the management of projects. Yet the coverage of such general management skills in the project management literature is rather uneven. Therefore, as is implied in the last sentence of the above quotation, project managers would need to access the general management literature to fill in gaps in their knowledge and skills.

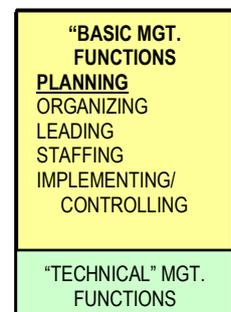
However, the general management literature is very voluminous, and finding the sought-after materials not necessarily easy. This suggested to me that it could be useful to present an overview of basic general management materials, which might help project managers directly, and/or help guide them towards more detailed relevant materials. This is the main aim of this series.

Another aim is to look in a little more detail at various ways in which the functions and component activities of general management are relevant to the management of projects. I have tended to focus on materials I found to be most relevant/useful in over sixty years of experience in both general management and project management.

The first article of this series (Stretton 2015g) proposed a basic general management knowledge framework, based on traditional/ classical management materials as they developed up to around the mid-1980s.

Although there have been many developments in management literature and practice since then, this framework is still widely quoted today, and its materials still underlie most modern management practices. The main functions of this framework are summarized on the right.

As indicated in this diagram, this second article develops the classical/traditional function of management planning, and its component



¹ This series of articles on the relevance of general management functions and activities to project management is by Alan Stretton, PhD (Hon), Life Fellow of AIPM (Australia). Alan is a pioneer in the field of professional project management and one of the most widely recognized voices in the practice of program and project management. Long retired, Alan is still accepting some challenging research and writing assignments; he is a frequent contributor to the *PM World Journal*. See his author profile at the end of this article.

activities, and discusses how component activities of management planning relate to the management of projects.

MANAGEMENT PLANNING OVERVIEW

Definitions and components of management planning

Management Planning: *The work a manager performs to predetermine a course of action.* (Allen 1964:97)

Allen identified seven components of planning, as follows:

- *Management forecasting:* the work a manager performs to estimate the future.
- *Establishing objectives:* the work a manager performs to determine the end results to be accomplished.
- *Programming:* the work a manager performs to establish the sequence and priority of action steps to be followed in reaching objectives.
- *Scheduling:* the work a manager performs to establish a time sequence for programmed steps.
- *Budgeting:* the work a manager performs to allocate resources necessary to accomplish objectives.
- *Establishing procedures:* the work a manager performs to develop and apply standardised methods of performing specified work.
- *Developing policies:* the work a manager performs to develop and interpret standing decisions that apply to repetitive questions and problems of significance to the enterprise as a whole.

MANAGEMENT PLANNING
Forecasting
Establishing Objectives
Programming
Scheduling
Budgeting
Establishing Procedures
Developing Policies

Koontz & O'Donnell 1978 had a somewhat different listing, but with many common elements, under the heading Types of Plans, as follows:

- Purposes or missions
- Objectives
- Strategies
- Policies
- Procedures
- Rules
- Programs
- Budgets

The two most notable additions to Allen's activities of planning are *purposes or missions*, and *strategies*. As will be seen, these components are included in the following discussions of management planning, which broadly follow Allen's headings. We start with management forecasting, and establishing objectives.

MANAGEMENT FORECASTING

Management Forecasting: *The work a manager performs to estimate the future.*
(Allen 1964:110)

The following discusses forecasting mainly in the context of looking for future opportunities for the organization.

Focus on opportunities

In his discussion of management forecasting, Allen made the key point that the manager of an enterprise “needs to look ahead on a systematic, continuing basis to anticipate the opportunities and hazards of the future. This he does by forecasting” (my emphasis).

I was attracted by the pragmatic observations of Peter Drucker 1966 about forecasting and opportunities.

The idea that we can forecast the future is plain absurd. In fact it is dangerous because one commits oneself then to wrong expectations. And yet, we have no choice but to do it

One first looks for the things that have already happened without yet having had real impact. What do they mean, what opportunities do they give us?

Organizational strategic vision/mission - “why the enterprise exists”

Before undertaking forecasting/opportunity identification activities for enterprises, most writers (including Koontz & O'Donnell, as just noted) advocate the development of a Vision/ Mission statement. This basically sets out the main, transcending reason for the enterprise's existence– i.e. “why the enterprise exists” (Mukhi et al 1988)

Strategic
Vision/
Mission

In the context of business planning, this typically includes a statement of what markets/clients the enterprise aims to serve, and with what products/services. It may also include statements about relationships with both internal and external stakeholders in the enterprise (e.g. employees, the community).

In recent times there has been extremely strong focus in the business world on “shareholder value”, with its implication that the sole mission of a business enterprise is to maximise profits for shareholders. Wagner 2000 reported that Kennedy 2000 discussed the narrowness of the “shareholder value” point of view,

which focuses solely on the needs of people who own shares in the company and ignore other stakeholders such as employees, customers, suppliers and the community.

Stuart Hornery 1977, then managing director of Lend Lease, expressed this broader viewpoint:

...in this day and age, to claim that the sole role of business enterprise is to make profits, seems to me like saying that the sole aim of an individual is to breathe. Profit is as necessary for business survival as breathing is for personal survival. But, profit as a sole objective tells us nothing about what the business is about – what markets it aims

to serve, with what products and services – nor how it proposes to satisfy the changing expectations of employees, suppliers, clients or the community.

In spite of the current dominance of “shareholder value”, it is clear that business enterprises have multiple missions, with many stakeholders, whose needs and expectations need to be balanced.

Environmental analysis

A common approach to seeking opportunities which is often discussed in the literature is to undertake environmental analyses. How this is done will vary according to the nature of the organization. The following note discusses one approach we used in Lend Lease many years ago.

Environ-
mental
analysis

Lend Lease’s Group Development Committee (essentially corporate strategic planning) undertook one type of environmental analysis in the late 1960s. (I was the secretary and main investigator from 1965 through 1972). We analysed the Australian economy in depth. Immediate opportunities did not leap out of these analyses, but they did provide a solid background of data and trends for helping recognise change patterns earlier than others, and to identify new opportunities.

Our chief executive, Dick Dusseldorp, had quite exceptional abilities in this area, and over this period we relied substantially on his personal skills and perceptions. But he was also very much concerned with helping his key people develop their own skills in foresight. For example, in 1970 he got me to organise a day-long conference of all the senior executives of Lend Lease, and read to them and discussed issues raised in Alvin Toffler’s book “Future Shock” (Toffler 1970), which had just been published in the USA. This was typical of the types of things he did to encourage his people to prepare the Lend Lease enterprises to actively seek potential opportunities.

MANAGEMENT OBJECTIVES

Establishing Management Objectives: *The work a manager performs to determine the end results to be accomplished.*
(Allen 1964:122)

Management by objectives

The perceived importance of the development of objectives in general management was highlighted by the emergence of the Management by Objectives (MBO) movement in the mid-sixties (e.g. Odiorne 1965, Humble 1967). Like many management “fads”, MBO had a lot to commend it, but appeared to be over-enthusiastically promoted, and met with uneven success.

Organizational strategic objectives

The next step in the organizational strategic planning process is strategic formulation and mapping, to establish the enterprise’s strategic objectives – i.e. the end results sought – that derive from the environmental analysis and the strategic mission statement.

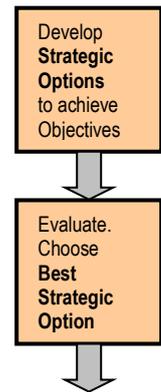
Strategic
Formulation;
Mapping;
Establishing
Objectives

The highest-level objectives can be described as general objectives, or long-range continuing objectives for the enterprise. These may take the form of five-year to ten-year objectives. When these have been established, they can be elaborated into intermediate-range objectives, and then into short-term objectives.

Elaboration into intermediate-range objectives – strategic options

Having established the general objectives, strategic plans are then developed to achieve these objectives. This typically involves the development of alternative strategies for achieving the objectives, initially (often) to test that the objectives are, in fact, attainable.

If they are not, then some modification is called for. If they are OK, then the best strategic option is chosen. Strategic plans also typically include elements of forecasting as discussed above, often in the form of SWOT analyses (of organizational Strengths & Weaknesses, and environmental Opportunities & Threats).

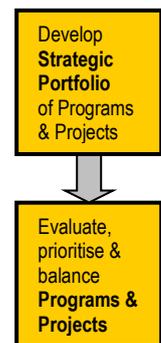


Developing strategic portfolios of projects (and programs)

The above development of organizational strategic formulation and planning activities is a combination of materials from Van Den Broecke 2005, PMI 2006a, PMI 2006b, Archibald 2009, and Archer & Ghasemzadeh 2004, 1999 – all of them from the project management literature. However, they are consistent with my reading of corresponding elements of the classical general management literature, so I have stuck with them.

However, to the best of my knowledge, the next two segments are not shared to any appreciable extent with the general management literature. These segments are:

- developing strategic portfolios of projects (and/or programs of projects) to help achieve the strategic objectives, and
- evaluating, prioritizing, and balancing the projects (and/or programs) comprising the strategic portfolio(s)



These segments are generally regarded as “givens” in the project management literature. However, they appear to me to also represent a point of transition between classical general management approaches, and those of the project management literature (as I have indicated by moving from tan infill to gold).

Summarising organizational strategic planning processes developed above

However, before discussing this in more detail, let us summarise the above discussions on organizational strategic process developed to date, in the form of the basic strategic formulation and planning flow-sheet shown in Figure 2-1.

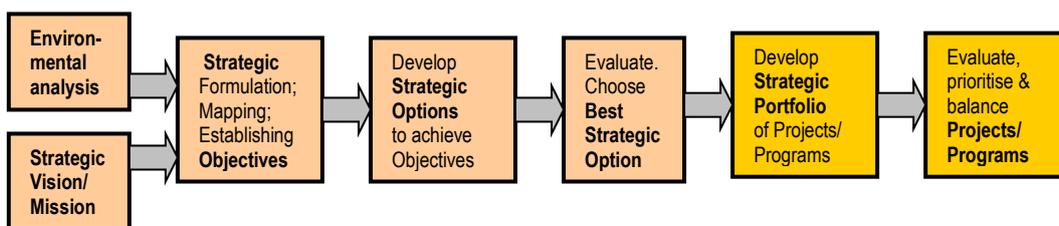


Figure 2-1: A basic strategic formulation and planning flow-sheet

A note on the origins of projects (and programs)

The above discussions show projects (and programs) originating via organizational strategic formulation / planning processes. Many years ago, Turner 1993:37 said:

All projects should therefore arise from a need to fulfill specific strategic objectives and achieve competitive advantage.

Up to recently I was not convinced about this, because emergency-type projects and other types of “emergent” projects do not appear to originate this way. However, I then revisited a paper by Mintzberg & Walters 1985, in which they say:

Deliberate and emergent strategies may be conceived as two ends of a continuum along which real-world strategies lie.

They go on to describe eight types of strategies on this continuum, labeled planned, entrepreneurial, ideological, umbrella, process, unconnected, consensus and imposed. The latter type was particularly relevant for me, because it carries with it the presumption that projects which are imposed on an organization mean that the organization’s strategy needs to be modified to accommodate such a change of circumstance. This, of course, reflects the reality of what happens in practice.

In these circumstances, I have opted to adopt the categorization of Mintzberg & Walters, which essentially sees all projects as originating in organization strategic formulation and planning processes, which include the development of strategic portfolios of projects (and programs), and prioritizing and balancing them in this strategic portfolio context.

This first step in originating projects is necessarily rather a broad-brush one. The next step is to focus on each individual project, and further develop each of them via systematic initiation processes. These essentially identify and develop the objectives of each individual project.

Project objectives – individual project initiation processes

Essentially, project objectives are largely determined by decisions made by general management in organizational strategic formulation and establishing strategic objectives. The former are developed in the initiation phases of individual projects, which I discussed in some detail in Stretton 2015c. Basically, I adopted a six-phase project life cycle developed by Archibald et al 2012, which included three phases of what can be termed project initiation processes.

I have added a summary description of these to Figure 2-1, as follows:

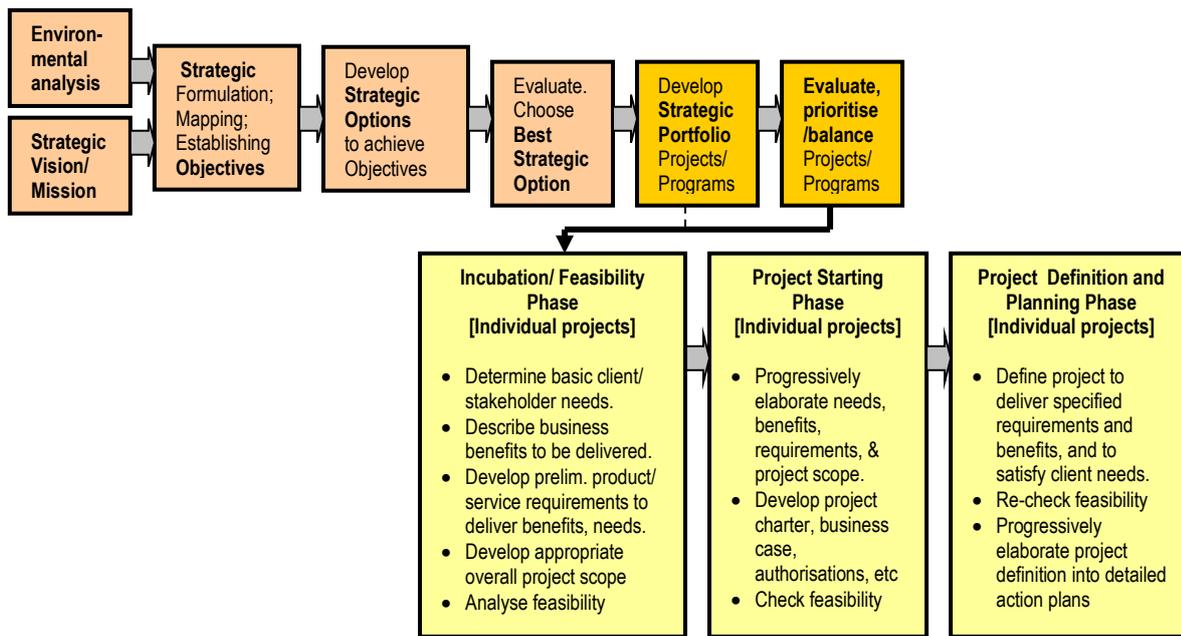


Figure 2-2: Adding three initiation phases for individual projects to the basic strategic formulation and planning flow-sheet

Essentially, the three initiation phases for individual projects define and refine the objectives of these projects. I am well aware that other writers have different sequences for project initiation activities – e.g. Epstein 2015 has twelve steps. The above certainly does not claim to be comprehensive, to cover all project types, but is merely representative. As such, it may hopefully provide some useful guidelines.

So, we see that general management forecasting and objectives have a strong *operational* relevance for their corresponding activities in project management, via a series of operational processes summarized in the Figure 2-2 flow-sheet. This relevance is also somewhat *derivative*, in the sense that project objectives, for example, *derive* from general management’s organizational strategic objectives.

I have developed these operational processes in some detail in this article, as these do not normally get the type of detailed attention that I believe their importance warrants.

PROGRAMMING, SCHEDULING AND BUDGETING

Programming: *the work a manager performs to establish the sequence and priority of action steps to be followed in reaching objectives.*

Scheduling: *the work a managers performs to establish a time sequence for programmed steps.*

Budgeting: *the work a manager performs to allocate resources necessary to accomplish objectives.*

It is first observed that *programming, scheduling and budgeting*, as defined above, are essentially the same activities in project management as they are in general management.

MANAGEMENT PLANNING
Forecasting
Establishing Objectives
PROGRAMMING
SCHEDULING
BUDGETING
Establishing Procedures
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In a general management environment, programming and scheduling would generally be predominantly concerned with refining existing operations. However, ***in the project context***, we have a much more dynamic environment, with tight time constraints. It is hardly surprising, therefore, that programming and scheduling have been much more extensively developed on projects than in general management. Indeed, some of the planning techniques developed in project management are being applied in the general management arena – so we have a kind of reciprocal relevance between the two regarding programming and scheduling.

Budgeting is concerned with resources to accomplish objectives via programming and scheduling. In the general management environment such resources would be relatively stable.

However, ***in the project context***, we have a much more dynamic environment, with differing resource requirements for different phases and stages of the project life cycle, accompanied by greater time pressures. But the basic processes of budgeting are essentially similar in both environments.

These types of contextual differences between the general management and project management are obvious in the planning context, and well understood. But there are a couple of other differences that may be worth a brief mention.

Annual verses project budgeting

One type of contextual difference, particularly in budgeting, derives from the fact that production-based organizations budget for the financial year, whereas projects budget for the complete project.

Projects are frequently in progress at the end of one or more financial years. However, on construction projects in particular, many countries, including Australia, have a taxation requirement that revenues, costs and profits on uncompleted projects are to be estimated and/or calculated and declared at the end of each financial year, using the percentage of completion method, which is covered in International Accounting Standard IAS 11 - *Construction Contracts*.

This type of artificial requirement is particular to projects, and has a high nuisance and irrelevance impact on project managers. This is because, at the end of each financial year, it unnecessarily diverts their attention away from issues which are much more immediately relevant to the effective management of their projects.

Estimating in project contexts

Estimating is essentially going through the programming, scheduling and budgeting processes prior to execution. Estimating re the production components of production-based organizations would not appear to be as demanding a task as estimating in the more dynamic project environment.

The importance of accurate estimating at all stages of the project life cycle is widely acknowledged. Yet, there are innumerable stories of project failures which are attributed wholly, or in part, to inadequacies in estimating, particularly in relation to costs, but often also schedules. This topic is not really well covered in the general project management literature, probably because good estimating tends to be rather project-type-specific. One of the better general contributions I am aware of is in Frame 1994.

Using planning to develop and analyze alternative approaches

Finally, the following comment on planning, particularly in the context of programming, scheduling and budgeting, derives from my extensive experience in project planning. On reflection, I believe we probably got the greatest benefits from planning when we used it to develop and evaluate alternative approaches to projects (and thence choosing the best approach), well before undertaking the projects.

The first project plan is seldom (if ever) the best one. All reasonable alternatives need to be developed and examined. An additional benefit from this approach is that it encourages the development of innovative solutions. In my time in Lend Lease these were normal procedures. In fact, we habitually used the catch-phrase, “There is always a better way”.

However, when I started teaching and discussing project planning with experienced mature age students in the Master of Project Management course at the University of Technology, Sydney (UTS), I quickly found out that they simply did not use the planning process to investigate alternative approaches to undertaking the project. Practically without exception, these (relatively experienced) students would produce only one project plan/schedule.

Now, I don’t know if this latter “one-shot” approach to project planning is still wide-spread. However, for those who may still be using this approach, all I can do here is to point out the potential benefits that will generally accrue from using planning to develop and evaluate alternative approaches to undertaking projects, before deciding on the best approach.

PROCEDURES AND POLICIES

Procedures and policies are essentially pre-planned standard guidelines.

Establishing Procedures: *The work a manager performs to develop and apply standardized methods of performing specified work.*
(Allen 1964:151)

Developing Policies: *The work a manager does to develop and interpret standing decisions that apply to repetitive questions and problems of significance to the enterprise as a whole.*
(Allen 1964:154)

It is first observed that *establishing procedures*, and *developing policies*, as defined above, are essentially the same activities in both general and project management.

However, **in the project context**, procedures and policies established by general management for the whole organization will also apply to projects conducted within that organization. The latter may well have additional project-specific add-ons, but none-the-less these will be dependent on the overall organizational procedures and policies.

Following are a couple of notes about procedures and policies.

Establishing procedures

Allen points out that “procedures have the advantage of helping assure that work is done in the best way and in a uniform manner; however, they can have the disadvantage of discouraging creative effort and ingenuity”.

MANAGEMENT PLANNING
Forecasting
Establishing objectives
Programming
Scheduling
Budgeting
Establishing <u>PROCEDURES</u>
Developing <u>POLICIES</u>

In the project context, it can be argued that procedures should have as important a role as they do in general management, mainly because of the frenetic pace of typical projects, which leave little if any time for learning by trial and error. However, I suspect that, in practice, there are likely to be differences in the ways procedures are developed and used between project-based organizations, and production-based organizations which also undertake projects. In the project-based Civil & Civic, we had extensive project-specific procedures, but they had been developed in conjunction with the overall organizational procedures, so that the two inter-meshed.

Developing Policies

It will be noticed that Allen's definition of a management policy has a particular meaning in the context he uses it, which is more like a regulation, or rule (a standard answer to repetitive questions). This, of course, is quite different from its meaning in some different contexts, such as government policies, for example.

In the project context, the desirability of having policies and/or regulations follows pretty much the same argument as for procedures. The pace of projects is such that the project manager does not want to have to ask certain types of questions over and over again.

SUMMARY OF MANAGEMENT PLANNING

In these discussions of management planning, we looked first at the component activities of general management forecasting and objectives, supplemented by mission statements and environmental analysis. This led to the development of a basic strategic formulation, objectives and planning flow-sheet, which included the development of a strategic portfolio of projects (and programs). The latter was then directly connected with the three initiation phases of individual projects. Therefore general management forecasting and objectives have a strong *operational* relevance for their corresponding project management activities.

MANAGEMENT PLANNING
Forecasting
Establishing objectives
Programming
Scheduling
Budgeting
Establishing procedures
Developing policies

Management programming and scheduling as defined in general management are directly relevant to project management. However contextual differences, which hinge around a much more dynamic environment, which include time constraints and pressures for change, have resulted in these planning activities being more extensively developed in the project management context. Indeed, it appears to be the case that some techniques developed in the project context are now being applied in the general management arena. So, we have a kind of two-way *reciprocal* relevance for these activities.

Establishing procedures, and developing policies, as defined above, are essentially the same activities in both general and project management. Normally, procedures and policies established by general management for the whole organization will also be directly relevant to projects conducted within that organization, although the latter may well have additional project-specific add-ons.

So, it has been established that all the component activities of management planning are relevant to the management of projects, albeit in somewhat different ways.

Finally, with regard to the major aim of this series, which is to present a short coverage of classical / traditional general management materials to project managers, I have not attempted

to give a comprehensive overall summary of all traditional/ classical general management materials in the management planning context. Rather, I have focused on those attributes which, for various reasons, I found most relevant in many decades of active involvement in both general and project management.

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Alan Stretton is one of the pioneers of modern project management. He is currently a member of the Faculty Corps for the University of Management & Technology (UMT), USA. In 2006 he retired from a position as Adjunct Professor of Project Management in the Faculty of Design, Architecture and Building at the University of Technology, Sydney (UTS), Australia, which he joined in 1988 to develop and deliver a Master of Project Management program. Prior to joining UTS, Mr. Stretton worked in the building and construction industries in Australia, New Zealand and the USA for some 38 years, which included the project management of construction, R&D, introduction of information and control systems, internal management education programs and organizational change projects. He has degrees in Civil Engineering (BE, Tasmania) and Mathematics (MA, Oxford), and an honorary PhD in strategy, programme and project management (ESC, Lille, France). Alan was Chairman of the Standards (PMBOK) Committee of the Project Management Institute (PMI®) from late 1989 to early 1992. He held a similar position with the Australian Institute of Project Management (AIPM), and was elected a Life Fellow of AIPM in 1996. He was a member of the Core Working Group in the development of the Australian National Competency Standards for Project Management. He has published over 140 professional articles and papers. Alan can be contacted at alanilene@bigpond.com.au.

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